CLAIMS

1. Apparatus for collecting ground radar data with polarization information comprising a main body (2) exhibiting a means of moving the apparatus (1) along the ground, a part (3) that rotates in relation to the main body supporting a pair of antennas of transmitter and receiver type (7, 8), a power source (5) with connected control unit (4) for controlling and governing the ground radar, a transmitter unit (9) electrically connected to one of the pair of antennas (7) for generating and transmitting radar pulses and a sampler unit (10) electrically connected to the other antenna (8) for receiving the reflected radar pulses, c h a r a c t e r i z e d in that the rotating pair of antennas (7, 8) supports the transmitter unit (9), sampler unit (10) and the A/D converter (11) included in the sampler unit, that the power source (5) and control unit (4) are located in the main body (2) and is electrically connected to the transmitter unit and sampler unit via a slip-ring arrangement (6), in which radar signals in digital form are conveyed via the slip-ring arrangement.

2. Apparatus according to claim 1, whereby the transmitter unit (9) is supported by one (7) of the pair of antennas (7, 8) that is used as the transmitter antenna.

3. Apparatus according to claim 1 or 2, whereby the sampler unit (10) and the A/D converter (11) is supported by one (8) of the pair of antennas (7, 8) that is used as the receiver antenna.

4. Apparatus according to any one of the claims 1 - 3, whereby the transmitter unit (9) comprises analogue high frequency equipment.

5. Apparatus according to any one of the previous claims, whereby the antennas (7, 8) are contained inside a housing (12).
